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EXAMINER

BOKHARI, SYED M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/722,194	Applicant(s) ADAMCZYK ET AL.	
	Examiner SYED BOKHARI	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11,23-33,45,48,50-52,54,56 and 58-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11,23-33,45,48,50-52,54,56 and 58-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant amendment filed on June 16th, 2009 has been entered. Claims 1-11, 23-33, 45, 48, 50-52, 54, 56 and 58-61 are still pending in the application.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 45 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 45, the claimed invention is not directed to a process, machine, manufacture, or composition of matter, or any new or useful improvement thereof. The claim is drawn to "computer program product" where no physical connection to the computer exists. There must be some connection between the computer program instructions and the physical device executing the instruction through a computer-readable medium that meets the statutory requirements. The acceptable language in computer processing, for example, will be "a computer readable medium coded with a computer program or computer executable instructions". Further, the claim limitations as recited in lines 6-8, "wherein the computer readable storage medium includes an

electronic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device or medium”, is non-statutory and does not meet the statutory requirement.

. Claims 48, 50-51 and 56 are rejected as they are dependent to claim 45.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 23 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963) and further in view of Roberts (US 6,574,195 B2).

Dravida et al. disclose a communication network for broadband system having routing identification based switching with the following features: regarding claim 1, a method of operating a data network between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network wherein the data service provider is remote from the data network, the method comprising (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7), and responsive to receiving at the data network the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service, saving the data flow characteristics of the data service for the routing gateway at the data network (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see

“the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11) and forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 23, a data network providing a data connection between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network the data network wherein the data service provider is remote from the data network comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7); and a memory configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent

network elements in broadband bidirectional access system, see “the network interface unit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11) and a second transceiver at the data network configured to forward the data flow characteristics of the data service to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 45, a computer program product configured to operate a data network between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network wherein the data service provider is remote from the data network the computer program product consisting of a computer readable storage medium having computer-readable program code embodied in the medium wherein the computer readable storage medium includes an electronic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device or medium the computer-readable program code comprising (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7 and

paragraph 0426 lines 1-12), computer-readable program code that is configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11) and computer-readable program code that is configured to forward the data flow characteristics of the data service to the routing gateway (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12);

Dravida et al. do not disclose the following features: regarding claim 1, receiving at the data network from the data service provider an identification of the routing gateway, an identification of the data service provider, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider; regarding claim 23, first transceiver at the data network configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider, data flow characteristics of the

data service for a session of the routing gateway using the data service provided by the data service provider; regarding claim 45, computer-readable program code that is configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider;

Mobley et al. disclose a satellite communication system for storing data at a subscriber terminal and responsive to a poll transmitting the store data with the following features: regarding claim 1, receiving at the data network from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 7B, shows a typical response data packet for either bent pipe or store and forward delivery to a gateway and from the gateway to a subscription delivery, see “the packet includes gateway identifier and service provider identifier” recited in column 15 lines 49-52); regarding claim 23, first transceiver at the data network configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 7B, shows a typical response data packet for either bent pipe or store and forward delivery to a gateway and from the gateway to a subscription delivery, see “the packet includes gateway identifier and service provider identifier” recited in column 15 lines 49-52); regarding claim 45, computer-readable program code that is configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 7B, shows a typical response data packet for either bent pipe or store and forward delivery to a gateway and from the gateway to a subscription delivery, see “the packet

includes gateway identifier and service provider identifier” recited in column 15 lines 49-52);

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. by using the features, as taught by Mobley et al., in order to provide receiving at the data network from the data service provider an identification of the routing gateway, an identification of the data service provider. The motivation of using these functions is to enhance the system in a cost effective manner.

Dravida et al. and Mobley et al. do not disclose the following features: regarding claim 1, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network; regarding claim 23, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network; regarding claim 45, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network wherein the data service provider is remote from the data network.

Roberts discloses a communication system for quality of service (QoS) management transmitted over computer system with the following features: regarding

claim 1, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network (Fig. 6, illustrates a high level flow diagram for identifying a flow block corresponding to a received data packet, see "the received data packet is formatted to a micro-flow data packet which includes a QoS field 310" recited in column 15 lines 10-30); regarding claim 23, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network (Fig. 6, illustrates a high level flow diagram for identifying a flow block corresponding to a received data packet, see "the received data packet is formatted to a micro-flow data packet which includes a QoS field 310" recited in column 15 lines 10-30); regarding claim 45, data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider wherein the data service provider is remote from the data network (Fig. 6, illustrates a high level flow diagram for identifying a flow block corresponding to a received data packet, see "the received data packet is formatted to a micro-flow data packet which includes a QoS field 310" recited in column 15 lines 10-30);

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al. by using the features of Roberts, in order to provide data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider

wherein the data service provider is remote from the data network. The motivation of using these functions is to enhance the system in a cost effective manner.

6. Claims 5-8, 27-30 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963) and further in view of Roberts (US 6,574,195 B2) as applied to claims 1, 19, 23 and 45 above, and further in view of Kamentani (US 2002/0003803 A1).

Dravida et al., Mobley et al. and Roberts disclose the claimed limitations as described in paragraph 4 above. Dravida et al., Mobley et al. and Roberts do not disclose the following features: regarding claim 5, wherein saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway; regarding claim 6, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network; regarding claim 7, wherein the first database is associated with a concentrator and the second database is associated with a service manager; regarding claim 8, wherein receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider and forwarding the request from the routing gateway to the data service provider; regarding claim 27, wherein the memory is further configured to save the data flow characteristics at the data network as an application flow control record for the routing gateway; regarding claim 28, wherein the memory is further configured to save the data flow

characteristics at first and second databases within the data network; regarding claim 29, wherein the first database is associated with a concentrator and the second database is associated with a service manager; regarding claim 30, wherein the second transceiver is further configured to receive a request from the routing gateway for a session using the data service provided by the data service provider and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway; regarding claim 50, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network and regarding claim 51, wherein the first database is associated with a concentrator and the second database is associated with a service manager.

Kametani discloses communication system for the exchange of data between the user terminals and the plurality of service providers with the following features: regarding claim 5, wherein saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway (Fig. 1, architecture of the data network, see “servers connected to IP network record information about the user and the service provider and information about the services” recited in paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8); regarding claim 6, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see “servers record information about the users and plurality of service provides” recited in paragraph 0030 lines 1-9, paragraph 0043 lines

1-6 and paragraph 0044 lines 1-3); regarding claim 7, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data network, see “sending the converted packet data to the user terminal and storing and managing account information” recited in paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3); regarding claim 8, wherein receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service” recited in paragraph 0068 lines 1-4) and forwarding the request from the routing gateway to the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “the terminal 7 forward the request through the gateway 2 to the service provider” recited in paragraph 0071 lines 1-17); regarding claim 27, wherein the memory is further configured to save the data flow characteristics at the data network as an application flow control record for the routing gateway (Fig. 1, architecture of the data network, see “servers connected to IP network record information about the user and the service provider and information about the services” recited in paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8); regarding claim 28, wherein the memory is further configured to save the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see “servers record information about the users and

plurality of service provides” recited in paragraph 0030 lines 1-9, paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3); regarding claim 29, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data network, see “servers record information about the users and plurality of service provides” recited in paragraph 0030 lines 1-9); regarding claim 30, wherein the second transceiver is further configured to receive a request from the routing gateway for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service” recited in paragraph 0068 lines 1-4) and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “the terminal 7 forward the request through the gateway 2 to the service provider” recited in paragraph 0071 lines 1-17); regarding claim 50, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see “servers record information about the users and plurality of service provides” recited in paragraph 0030 lines 1-9, paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3) and regarding claim 51, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data

network, see “sending the converted packet data to the user terminal and storing and managing account information” recited in paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3).

It would have obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al. and Roberts by using the features, as taught by Kametani, in order to provide saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway, saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network, the first database is associated with a concentrator and the second database is associated with a service manager and receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider and forwarding the request from the routing gateway to the data service provider. The motivation of using these functions is to enhance the system in a cost effective manner.

7. Claims 2, 24, 52, 54 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963), Roberts (US 6,574,195 B2) and Kamentani (US 2002/0003803 A1) as applied to claims 1, 23, and 45 above, and further in view of Jeong et al. (USP 6,795,443 B1).

Dravida et al., Mobley et al., Roberts and Kamentani disclose the claimed limitations as described in paragraph 5 and 7 above. Dravida et al. disclose the following features: regarding claim 52, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 54, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 56, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12);

Dravida et al., Mobley et al., Roberts and Kamentani do not disclose the following features: regarding claim 2, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification; regarding claim 24, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification; regarding claim 52, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification and regarding claim 56, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification.

Jeong et al. disclose a communication system for providing IP level connectivity between internet access terminals using service gateway with the following features: regarding claim 2, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see “network comprises a source terminal A10, a target terminal B70 and a digital subscriber line” recited in column 4 lines 36-40) and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 2, service providing procedure for establishing an IP level connectivity, see “a terminal identifier is required for a service gateway” recited in column 8 lines 63-67); regarding claim 24, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see “network comprises a

source terminal A10, a target terminal B70 and a digital subscriber line” recited in column 4 lines 36-40) and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 2, service providing procedure for establishing an IP level connectivity, see “a terminal identifier is required for a service gateway” recited in column 8 lines 63-67); regarding claim 52, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 1, network architecture for establishing IP connectivity, see “network comprises a source terminal A10, a target terminal B70 and a digital subscriber line” recited in column 4 lines 36-40); regarding claim 56, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 1, network architecture for establishing IP connectivity, see “network comprises a source terminal A10, a target terminal B70 and a digital subscriber line” recited in column 4 lines 36-40).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al., Roberts and Kamentani by using the features, as taught by, Jeong et al. in order to provide wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification. The motivation of using these functions is to enhance the system in a cost effective manner.

8. Claims 3, 9-11, 25, 31-33, 48, 58 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963), Roberts (US 6,574,195 B2) and Kamentani (US 2002/0003803 A1) as applied to claims 1, 23 and 45 above, and further in view of Menditto et al. (USP 6,981,029 B1) and Motley (US 2002/0136224 A1).

Dravida et al., Mobley et al., Roberts and Kamentani disclose the claimed limitations as described in paragraph 5 above. Dravida et al. disclose the following features: regarding claim 58, wherein the data service provider comprises an application data service provider located remote from the data network, wherein the data service comprises an application data service (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7); regarding claim 60, wherein the data service provider comprises an application data service provider located remote from the data network; wherein the data service comprises an application data service (Fig. 3, illustrates a network configuration of intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7).

Kamentani disclose the following features: regarding claim 9, providing an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider” recited in paragraph 0045 lines 1-14); regarding claim 31, wherein the first and second transceivers are further configured to provide an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider” recited in paragraph 0045 lines 1-14); regarding claim 58, providing an interconnection between the routing gateway and the application data service provider through the data network in accordance with the data flow characteristics to thereby support a session of the routing gateway using the application data service provided by the application data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a

service provider side, see “when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider” recited in paragraph 0045 lines 1-14); regarding claim 60, wherein the first and second transceivers are configured to provide an interconnection between the routing gateway and the application data service provider through the data network in accordance with the data flow characteristics to thereby support a session of the routing gateway using the application data service provided by the application data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see “when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider” recited in paragraph 0045 lines 1-14).

Dravida et al., Mobley et al., Roberts and Kamentani do not disclose the following features: regarding claim 3, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 10, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider and terminating the interconnection between the routing gateway and the data service

provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider; regarding claim 11, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request; regarding claim 25, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 32, wherein the memory is further configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider, and wherein the first and second transceivers are further configured to terminate the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider; regarding claim 33, wherein the first transceiver is further configured to receive a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, and wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow characteristics; regarding claim 48, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority

characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 58, wherein the data flow characteristics of the application data service include a bandwidth characterization for the application data service and a priority characterization for the application data service both received from the application data service provider, the method further comprising, after providing the interconnection and completing the session, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the application data service provided by the application data service provider and after providing the interconnection and completing the session, terminating the interconnection between the routing gateway and the application data service provider to thereby terminate the session of the routing gateway using the application data service provided by the application data service provider; regarding claim 60, wherein the data flow characteristics of the application data service include a bandwidth characterization for the application data service and a priority characterization for the application data service both received from the application data service provider, wherein after providing the interconnection and completing the session, the memory is configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the application data service provided by the application data service provider; and wherein after providing the interconnection and completing the session, the first and second transceivers are configured to terminate the interconnection

between the routing gateway and the application data service provider to thereby terminate the session of the routing gateway using the application data service provided by the application data service provider.

Menditto et al. disclose an information service provider network includes a content gateway to process requests for information from the client terminal with the following features: regarding claim 3, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-48) and a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic policies of priority characterization for the data service” recited in column 4 lines 57-64); regarding claim 10, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “terminating the connection with the client terminal ” recited in column 10 lines 57-59); regarding

claim 11, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request (Fig. 2, a the process of routing information in the internet service provider network, see “when request is received removes the information of latest recently used connection ” recited in column 11 lines 50-56) ; regarding claim 25, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic policies of priority characterization for the data service” recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see “content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server” recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 consults the content gateway directory and routes the request to specified server”

recited in column 4 lines 48-56); regarding claim 32, wherein the memory is further configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and wherein the first and second transceivers are further configured to terminate the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “terminating the connection with the client terminal ” recited in column 10 lines 57-59); regarding claim 33, wherein the first transceiver is further configured to receive a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, and wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow characteristics (Fig. 2, a the process of routing information in the internet service provider network, see “when request is received removes the information of latest recently used connection ” recited in column 11 lines 50-56); regarding claim 48, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-

48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic policies of priority characterization for the data service” recited in column 4 lines 57-64); regarding claim 58, after providing the interconnection and completing the session, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the application data service provided by the application data a service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and after providing the interconnection and completing the session, terminating the interconnection between the routing gateway and the application data service provider to thereby terminate the session of the routing gateway using the application data service provided by the application data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “terminating the connection with the client terminal ” recited in column 10 lines 57-59); regarding claim 60, wherein the data flow characteristics of the application data service include a bandwidth characterization for .the application data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-48) and a priority characterization for the application data service both received from the application data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic

policies of priority characterization for the data service” recited in column 4 lines 57-64), wherein after providing the interconnection and completing the session, the memory is configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the application data service provided by the application data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and wherein after providing the interconnection and completing the session, the first and second transceivers are configured to terminate the interconnection between the routing gateway and the application data service provider to thereby terminate the session of the routing gateway using the application data service provided by the application data service provider (Fig. 2, a process of routing information in the internet service provider network, see “terminating the connection with the client terminal” recited in column 10 lines 57-59).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al., Roberts and Kamentani by using the features, as taught by, Menditto et al. in order to provide the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided

by the data service provider and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request, the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network. The motivation of using these functions is to enhance the system in a cost effective manner.

Dravida et al., Mobley et al., Roberts, Kamentani and Menditto et al. do not disclose the following features: regarding claim 3, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 48, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 58, wherein the data flow characteristics of the application data service include a bandwidth characterization for the application data

service and a priority characterization for the application data service both received from the application data service provider, the method further comprising.

Motley disclose a communication system that is adapted to extend voice channel capacity with the following features: regarding claim 3, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 9, illustrating the packeting information for a frame relay message block during voice data transmission, see “priorities and bandwidth parameters are transmitted” recited in paragraph 0058 lines 1-6); regarding claim 48, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 9, illustrating the packeting information for a frame relay message block during voice data transmission, see “priorities and bandwidth parameters are transmitted” recited in paragraph 0058 lines 1-6); regarding claim 58, wherein the data flow characteristics of the application data service include a bandwidth characterization for the application data service and a priority characterization for the application data service both received from the application data service provider, the method further comprising (Fig. 9, illustrating the packeting information for a frame relay message block during voice data transmission, see “priorities and bandwidth parameters are transmitted” recited in paragraph 0058 lines 1-6).

It would have been obvious to one of the ordinary skill in the art at the time of

invention to modify the system of Dravida et al. with Mobley et al., Roberts, Kamentani and Menditto et al. by using the features, as taught by, Motley, in order to provide forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network. The motivation of using these functions is to enhance the system in a cost effective manner.

9. Claims 4 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963), Roberts (US 6,574,195 B2) and Kamentani (US 2002/0003803 A1) as applied to claims 1, 23 and 45 above, and further in view of Nassar (US 2004/0004968 A1).

Dravida et al., Mobley et al., Roberts and Kamentani disclose the claimed limitations as described in paragraph 5 above. Dravida et al., Mobley et al., Roberts and Kamentani do not disclose the following features: regarding claim 4, wherein receiving further includes receiving an authorization code for the data service, the method further comprising and before saving the data flow characteristics, validating the authorization code and regarding claim 26, wherein the first transceiver is further configured to receive an authorization code for the data service, and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics.

Nassar discloses a communication system for dynamic simultaneous connection to multiple service providers with the following features: regarding claim 4, wherein

receiving further includes receiving an authorization code for the data service, the method further comprising (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see “the security server 155 to authenticate and authorize the subscriber 100” recited in paragraph 0030 lines 11-17) and before saving the data flow characteristics, validating the authorization code (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see “security server 155 sends a message identifying the subscriber 100” recited in paragraph 0030 lines 17-20) and regarding claim 26, wherein the first transceiver is further configured to receive an authorization code for the data service (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see “the security server 155 to authenticate and authorize the subscriber 100” recited in paragraph 0030 lines 11-17) and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see “security server 155 sends a message identifying the subscriber 100” recited in paragraph 0030 lines 17-20).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al., Roberts and Kamentani by using the features, as taught by, Nassar in order to provide , wherein receiving further includes receiving an authorization code for the data service, the

method further comprising and before saving the data flow characteristics, validating the authorization code and the first transceiver is further configured to receive an authorization code for the data service, and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics. The motivation of using these functions is to enhance the system in a cost effective manner.

10. Claims 59 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Mobley et al. (US 5,708,963), Roberts (US 6,574,195 B2), Kamentani (US 2002/0003803 A1), Menditto et al. (USP 6,981,029 B1) and Motley (US 2002/0136224 A1) as applied to claims 1, 23, 45, 58 and 60 above, and further in view of Chen et al. (US 2004/0085969 A1).

Dravida et al. Mobley et al., Roberts, Kamentani, Menditto et al. and Motley et al. do not disclose the following features: regarding claim 59, wherein the application data service comprises gaming, video on demand, and/or access to a virtual private network and regarding claim 61, wherein the application data service comprises gaming, video on demand, and/or access to a virtual private network.

Chen et al. disclose a communication system for dynamically establishing broadband quality of service connection on demand with the following features: regarding claim 59, wherein the application data service comprises gaming, video on demand, and/or access to a virtual private network (Fig. 1, a block diagram showing network architecture for proxy signaling, see “includes video on demand and gaming

services” recited in paragraph 0078 lines 1-12) and regarding claim 61, wherein the application data service comprises gaming, video on demand, and/or access to a virtual private network (Fig. 1, a block diagram showing network architecture for proxy signaling, see “includes video on demand and gaming services” recited in paragraph 0078 lines 1-12).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Mobley et al., Roberts, Kamentani, Menditto et al. and Motley et al. by using the features as taught by Chen et al., in order to provide the application data service comprises gaming, video on demand, and/or access to a virtual private network. The motivation of using these functions is to enhance the system in a cost effective manner.

Response to Arguments

Applicant's arguments with respect to claims 1-11, 23-33, 45, 48, 50-52, 54, 56 and 58-61 have been considered but are moot in view of the new ground(s) of rejection. Applicant states in the remarks regarding claim 1, “Dravida fails to teach or suggest receiving data flow characteristic of a data service for a session of a routing gateway from the data service provider; saving data flow characteristics (received from the data service provider) at the data network; or forwarding data flow characteristics (received from the data service provider) to the routing gateway”. Examiner respectfully disagrees. Dravida teaches the claim limitations that NIU receives flow control flags from the SAS and NIU also stores the flow control flag which it receives from SAS as

recited in paragraph 0261 lines 1-11). Applicant states in the remarks "Mobley et al disclose a satellite communications system for storing data at a subscriber terminal and responsive to a poll transmitting the store data with the following features . . . receiving a t the data network from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 7B, shows a typical response data packet for either bent pipe or store and forward delivery to a gateway and from the gateway to a subscription delivery, see "the packet includes gateway identifier and service provider identifier" recited in column 15, lines 49-52). . . ." and "Accordingly, the data packet response to a polling request shown in Figure 7B of Mobley is received from a subscriber terminal (as opposed to being received from a data service provider), and Mobley's data packet response thus teaches the opposite of receiving identifications (of a routing gateway and a data service provider) from a data service provider. The Applicants thus submits that Mobley fails to provide the disclosure alleged by the Office Action and that Mobley actually teaches away from the recitations of Claim 1". Examiner respectfully disagrees on the following reasons: (a) although, Mobley discloses a satellite communication system but it also states "The system according to the present invention of FIG. 5A should not be construed to be limited to satellite direct-to-home subscription information delivery services. The present invention may be equally utilized in cable or fiber optical system or other system in which telephone, cable or other known return path communications are unlikely" recited in column 10 lines 8-13", (b) The motivation of combining Mobley with Dravida is to incorporate the function of a terminal (like in this case, a subscriber terminal) to send a

packet with the information of gateway identifier (gateway ID), and the identification of the sender or subscriber identifier (as in this case subscriber terminal is the sender).

The same functions of Mobley can be incorporated with the system of Dravida to enable it for service provider (sending terminal) to send the information (packet) includes the information of the gateway identifier (gateway ID) and the service provider (sender) identifier. Applicant submits in the remarks "Roberts, however, fails to teach or suggest receiving data flow characteristics of a data service for a session from a data service provider remote from the data network. In contrast: Roberts states that a micro-flow classifier 530 (shown in Figure 5 as an element of line card 41 0 of switch 220 shown in Figure 4 of network 200 shown in Figure 2) utilizes "extracted layer information to determine 7 10 QoS descriptor values that are to be associated with the flow block corresponding to the received data packet." Roberts, col. 13, lines 8- 12 (underline added). Accordingly, the QoS descriptor values of Roberts are determined by micro-flow classifier 530 (which is an element of network 200), so that Roberts fails to teach or suggest receiving data flow characteristics of a data service for a session from a data service provider remote from the data network. Assuming for the sake of argument that Roberts does disclose receiving data flow characteristics from a data service provider remote from the data network". Examiner once again respectfully disagrees. The motivation of combining the functions, as disclosed by Robert, with the system of Dravida with Mobley is to rectify the deficiency of the combined system (of Dravida and Mobley) by incorporating the function of receiving the data flow characteristics of the data service for the session of the routing gateway. Robert discloses "the present

invention provides network with an improved quality of service (QoS) based upon per flow state information. By providing the ability to associate specific state information to a uniquely identifiable set of data signals that typically have the same open system interconnection model network layer and transport layer characteristics (micro-flow), a specific quantified level of QoS can be associated with that micro-flow" recited in column 5 lines 33-40". The network 200 is comprised of switches remote to each other and the QoS descriptor are communicated from one switch to another switch via a QoS field. Applicant states in the remark "Roberts fails to teach or suggest forwarding such data flow characteristics (received from a remote data service provider) to a routing gateway at a customer premises remote from the data network". Examiner respectfully disagrees. Dravida teaches the claimed limitations "forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network recited in paragraph 0308 lines 1-12).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Syed Bokhari/
Examiner, Art Unit 2416
9/4/2009

/KWANG B. YAO/

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